

What is claimed is:

1. A method of steganographically embedding geo-location information in an image captured by a camera associated with cell phone, said method comprises steps of:

5 determining geo-location information based on attributes associated with a cell phone network; and
steganographically embedding the geo-location information in the image.

2. The method of claim 1, wherein the cell phone network comprises a signal
10 tower, and the attributes are associated with the tower.

3. The method of claim 2, wherein the cell phone communicates a signal, and wherein the attributes comprise strength of the signal as received by the tower and a direction associated with the signal.

15 4. The method of claim 1, wherein the cell phone network comprises a plurality of towers, and wherein the cell phone communicates a signal, the attributes comprising an evaluation of the signal as received by the plurality of towers.

20 5. The method of claim 4, wherein the evaluation considers relative reception timing of the signal as received by each of the plurality of towers.

6. The method of claim 4, wherein the evaluation involves triangulation.

7. The method of claim 1, wherein the cell phone comprises a steganographic embedder, and uses the embedder to steganographically embed the geo-location
5 information in the image.

8. The method of claim 1, wherein the cell phone network comprises a steganographic embedder located remotely from the cell phone, and wherein the embedder steganographically embeds the geo-location information in the image.
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9. The method of claim 8, further comprising communicating the embedded image to the cell phone.

10. The method of claim 1, wherein the steganographic embedding comprises
15 digital watermarking.

11. A method of steganographically embedding geo-location information in an image captured by a camera which is integrated with cell phone, wherein the cell phone comprises a wireless interface, said method comprises steps of:
20 communicating with a global positioning system (GPS) receiver, which is remotely located from the cell phone via the wireless interface;
receiving geo-location information from the GPS receiver; and

steganographically embedding the geo-location information in the image.

12. The method of claim 11, wherein the geo-location information and image are communicated to a cell phone network server which includes a steganographic embedder,
5 and wherein the cell phone network server performs said step of steganographically embedding the geo-location information in the image.

13. A method of providing internet access for a computer user comprising:
issuing the user a digitally watermarked object, wherein the digitally watermarked
10 object comprises a digital watermark embedded therein, the digital watermark comprising an identifier;
associating the identifier with the user via a data repository;
receiving optical scan data corresponding to a portion of the object, the portion comprising the digital watermark;
15 decoding the digital watermark from the scan data to obtain the identifier;
verifying that the identifier is valid; and
enabling internet access for the user when the identifier is valid.

14. The method of claim 13, wherein the object comprises at least one of a hotel
20 room key and an object provided by a hotel.

15. The method of claim 14, further comprising associating a bill for internet access with the user via the identifier.

16. A method of accumulating financial charges attributable to a customer so as to minimize transaction fees, the customer possession a digitally watermarked object, the digitally watermarked object comprising a digital watermark including an identifier, said method comprising:

receiving scan data associated with the digitally watermarked object;

analyzing the scan data to obtain the identifier from the object;

accessing a data record that is associated with the identifier;

updating the data record to reflect a monetary amount owed for a transaction;

accumulating a plurality of such monetary amounts in the data record; and

forwarding the accumulated amounts for payment at least when one of the

following occur: a predetermined amount for the accumulated amount is reached, and

after a predetermined amount of time.

17. The method of claim 16, wherein the aggregated monetary amounts are forwarded to the customer for payment.

18. The method of claim 16, wherein the aggregated monetary amounts are forwarded to a credit agency for payment.

19. The method of claim 18, wherein the credit agency comprises at least one of a bank and credit card company.

20. The method of claim 16, wherein the identifier comprises information
5 personal to the customer.

21. The method of claim 20, wherein the identifier comprises a hash of the personal information.

10 22. The method of claim 16, wherein the identifier is combined with information provided by the customer to access the data record that is associated with the identifier.

23. The method of claim 16, wherein the digital watermark further comprises a biometric, and said method comprises comparing a biometric sample of the customer to
15 the biometric carried by the digital watermark.

24. A method to regulate protected content while allowing fair use of the content, wherein the content includes a digital watermark embedded therein, the digital watermark including at least a copy protection indicator and a time interval indicator, said
20 method comprising:

recognizing the content as protected content by reference to the copy protection indicator; and

upon recognition of the content as protected content, measuring the amount of content rendered by reference to the time interval indicator, and disabling rendering after a predetermined amount of content has been rendered, the predetermined amount corresponding to fair use of the content.

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25. A method for providing royalty payments for content distributed via a network, said method comprising:

receiving registration information from a participant who requires royalty payments for content to be distributed;

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assigning a unique identifier to the participant;

steganographically embedding the content with the identifier; and

associating a royalty payment action with the identifier in a data repository.

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26. The method of claim 25, wherein the royalty payment action is initiated when a rendering device decodes the steganographic embedding and obtains the identifier during a transaction, the identifier being provided to the data repository and in response, said method comprises performing the royalty payment action, wherein the transaction exceeds evaluation of the content.

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27. The method of claim 26, wherein the network comprises a peer-to-peer file-sharing network.

28. The method of claim 27, wherein the royalty payment action comprises determining a percentage of revenue that corresponds to an amount of times the content undergoes a transaction.

5 30. A method of monitoring a content item which is to be broadcast through a broadcasting network, the content item to be identified by a fingerprint of the content derived from the content itself, said method comprising:

 maintaining a limited list of content items, the list consisting of those content items that are to be broadcast by the broadcasting network during a predetermined time
10 period, the limited list of content items being respectively associated with one or more fingerprints derived from the content items themselves;

 deriving a fingerprint from a content item monitored from the broadcast network;
and

 interrogating the limited list of content items with the fingerprint to identify the
15 monitored content item.

31. A method of authenticating video comprising at least a first frame and a second frame, said method comprising:

 determining a time stamp associated with the video; and
20 providing a digital signature of the video, wherein the digital signature comprises

data corresponding to at least a portion of the first frame and data corresponding to at least a portion of the second frame, said digital signature further comprising data corresponding to the time stamp.

5 32. The method of claim 31, further comprising providing geo-location information associated with the video, wherein the digital signature further comprises data corresponding to the geo-location information.

 33. The method of claim 31, wherein the first frame and the second frame are
10 adjacent frames.

 34. The method of claim 31, wherein the digital signature is carried via a reversible digital watermark.

15 35. The method of claim 31, wherein the digital signature is carried via a file header.